

2 Sheets—Sheet 1.

C. K. DONNELL.

COMBINED BURGLAR ALARM AND DOOR FASTENER.

No. 432,987.

Patented July 29, 1890.



Ezra H. White
E. W. Meader

INVENTOR

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Charles K. Zornell
BY Almon Robinson

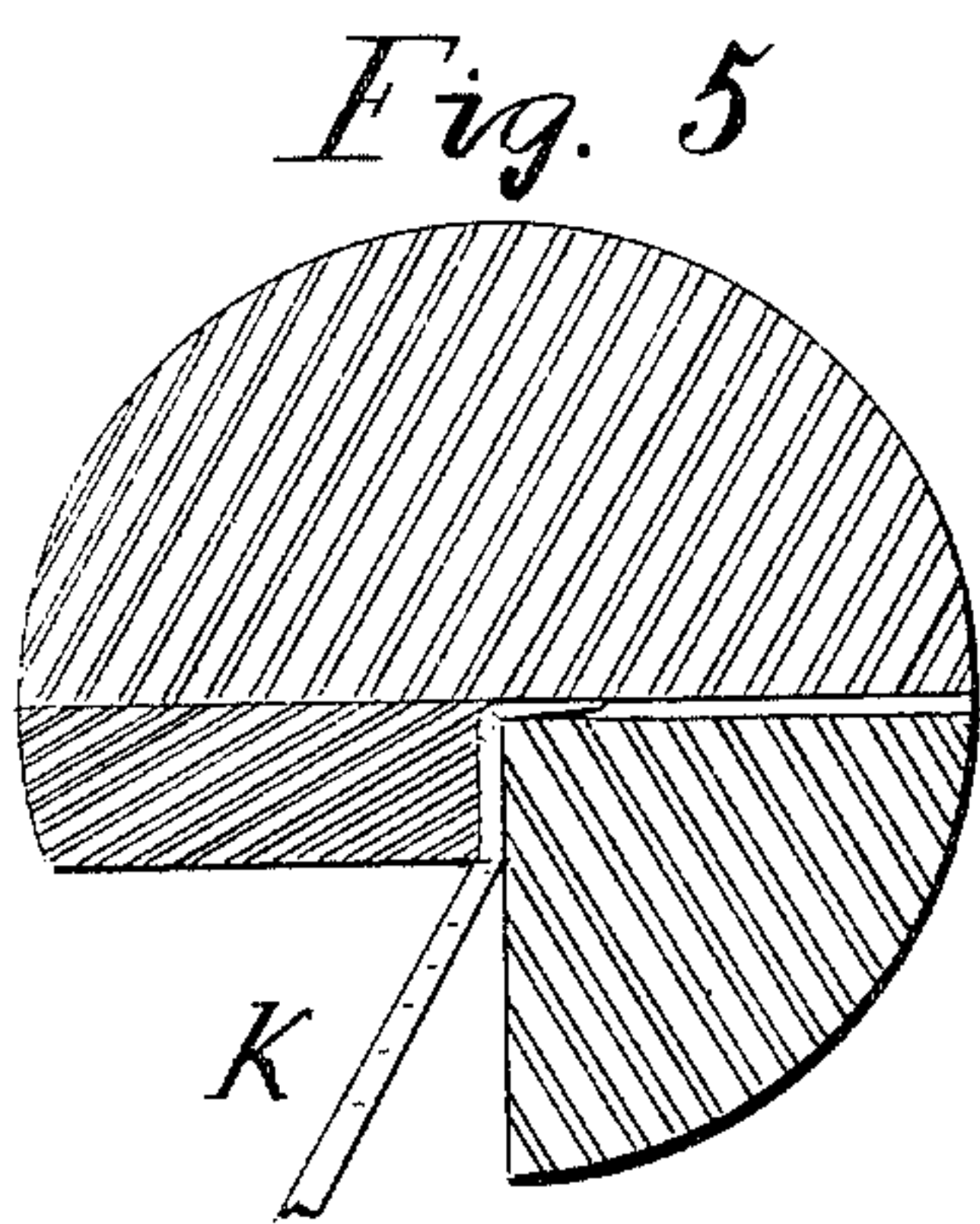
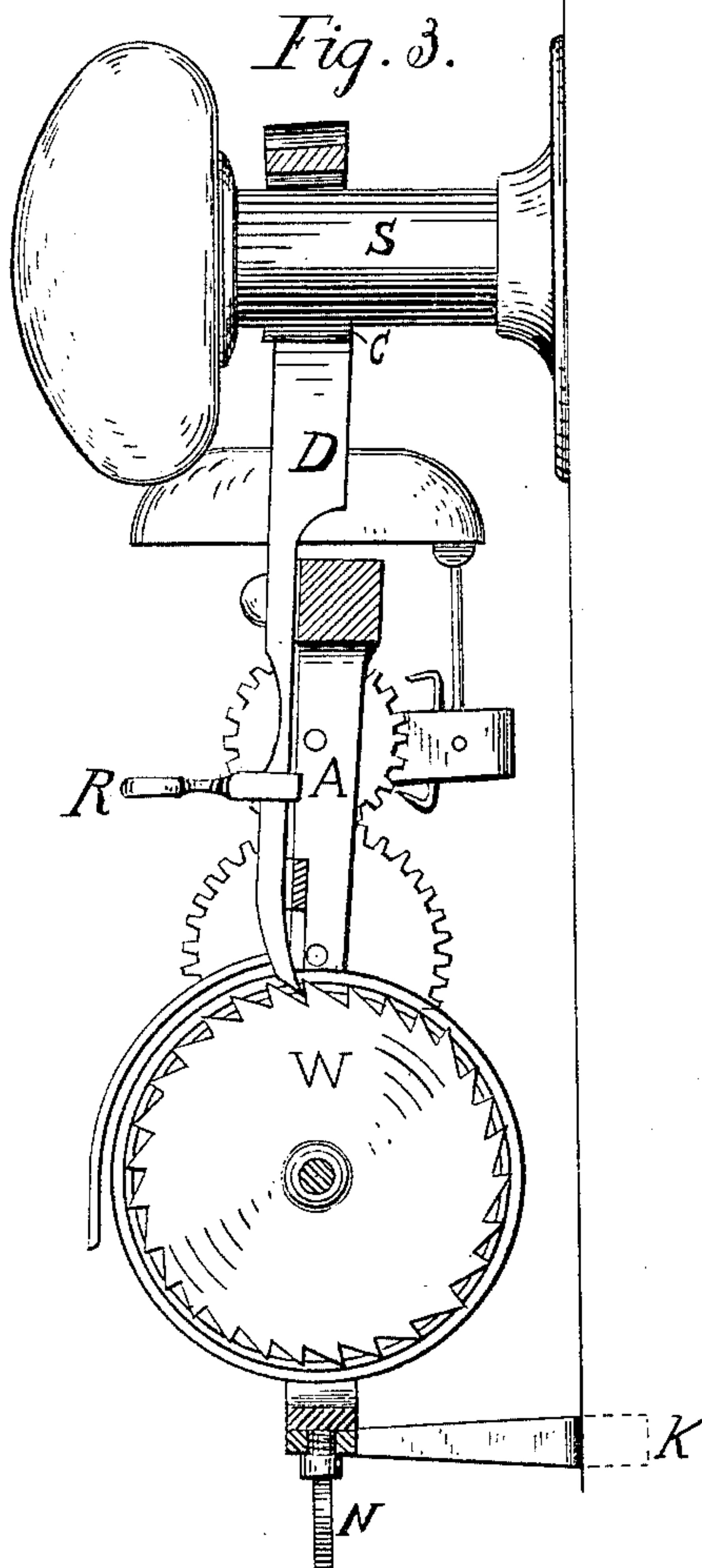
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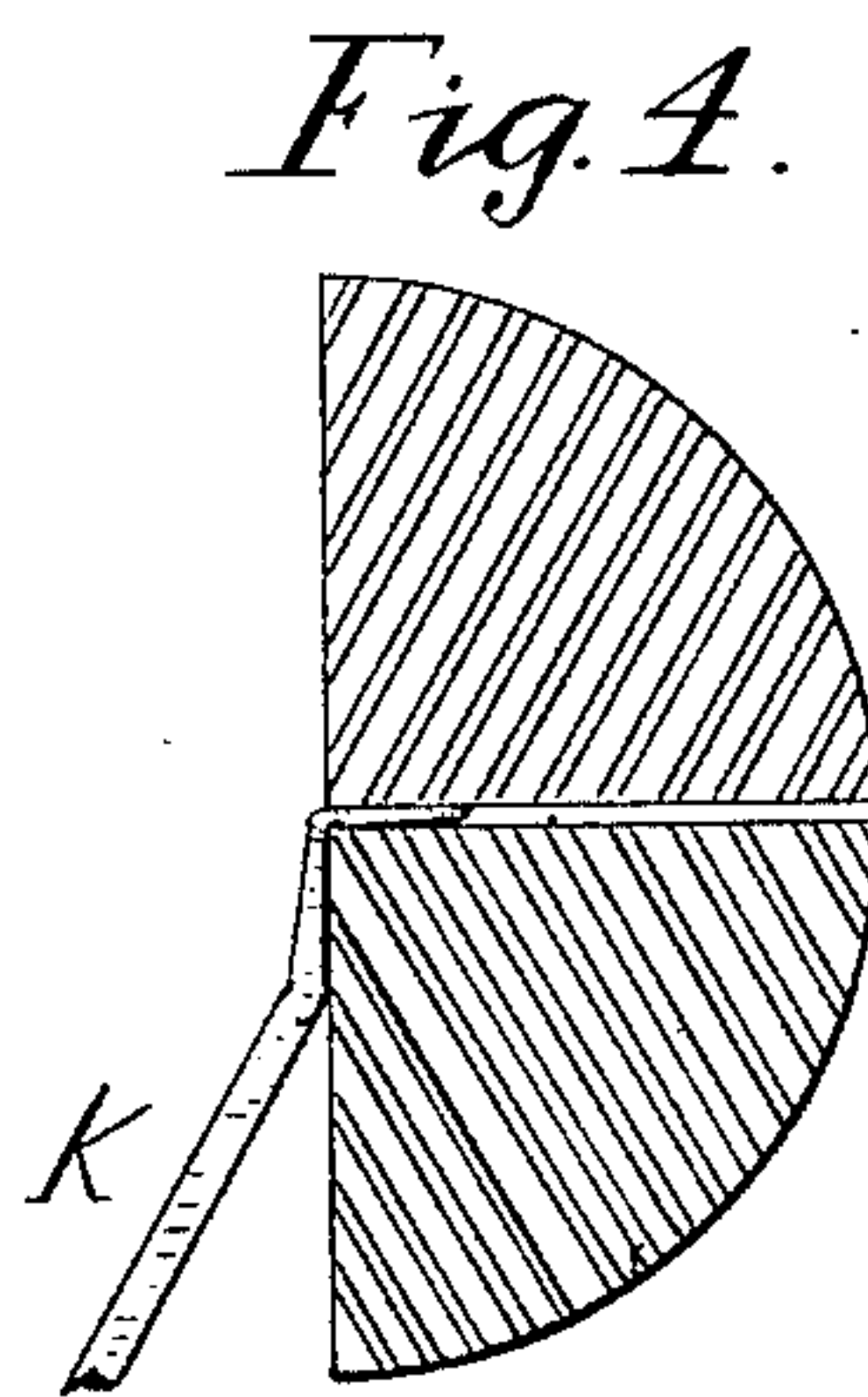
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WITNESSES:

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UNITED STATES PATENT OFFICE.

CHARLES K. DONNELL, OF WEBSTER, MAINE.

COMBINED BURGLAR-ALARM AND DOOR-FASTENER.

SPECIFICATION forming part of Letters Patent No. 432,987, dated July 29, 1890.

Application filed September 9, 1889. Serial No. 323,492. (Model.)

To all whom it may concern:

Be it known that I, CHARLES K. DONNELL, a citizen of the United States, residing at Webster, in the county of Androscoggin and State of Maine, have invented a new and useful Improvement in Combined Burglar-Alarms and Door-Fasteners, of which the following is a specification.

My invention relates to that class of burglar-alarms which are attached to door-knobs and in which an alarm is given when the door-knob is turned. Alarms of this class as heretofore made do not in any way hinder the burglar from entering the room.

A principal object of my invention is to provide a device which shall give warning of the first attempt to open the door, and shall also prevent the door from being unlatched.

A further object of my invention is to provide a convenient means of sounding an alarm when a window is opened or any particular article in the room is disturbed.

My invention consists of a clock-work or other alarm having a detent which is attached to the shank of the door-knob, and an attachment which prevents the case or frame from moving sidewise more than enough to release the detent.

My invention also comprises various details hereinafter more fully set forth.

In the accompanying drawings, Figure 1 is a front elevation. Fig. 2 shows the reversible catch which holds the alarm in place turned at right angles to its position in Fig. 1. Fig. 3 is a sectional side elevation of the whole device, taken through xy of Fig. 1. Fig. 4 is a sectional detail showing the mode of attachment when the door swings inward, and Fig. 5 similarly shows the mode of attachment when the door swings outward.

In the accompanying drawings, S is the shank of the door-knob. The alarm is attached to this shank by means of the piece D, which hooks over it, while a thumb-screw T presses the clamping-piece C against its side. The piece D, which serves also as the movable detent that releases the alarm, is attached to the frame-work A of the device by a pivot on which it is free to oscillate a sufficient distance to release the wheel-work, which it keeps from turning.

A case covering any desired part of the mechanism may be attached to the framework A. To the lower part of this framework is attached the adjustable and reversible catch K by means of the thumb-screw N, which passes through the slot m . This catch K enters the crevice between the door and its jamb, as shown in Figs. 4 and 5.

V is a countersunk hole in the piece K. Through this hole a wood-screw may be inserted if it is desired to have the alarm attached to the door when not in use. Care should be taken not to turn this wood-screw in far enough to clamp the catch K tightly against the door. The detent D slips between the teeth of the ratchet-wheel W, which is mounted upon the principal shaft of the clock-work of the alarm. H is a thumb-piece upon the same shaft.

By reducing the thickness of the lower part of the detent D, I give it sufficient flexibility to permit of its resting upon the projection a ; but as soon as it is moved in either direction far enough to release the wheel W it slips off from the projection a and, springing downward, catches against either the side b or b' of a . This prevents it from being slipped back between the teeth of W by any further movement of the shank S.

The perforated piece R, which projects from the detent D, serves for the attachment of the strings or wires $Z Z'$, which connect the alarm with windows, other doors, &c., when desired.

In using my invention I first hook the upper end of the detent over the shank S of the door-knob. Then I adjust in length and position the reversible-catch K until the lip at the end shown in Fig. 2 just slips over the edge of the door, clamping it in place by the thumb-screw N. I then wind up the alarm by turning the thumb-piece H. The detent D is made sufficiently flexible and elastic to permit the teeth of the ratchet-wheel W to slip under it. Finally, the alarm may be firmly connected with the door-knob by turning the thumb-screw T. If an attempt should then be made to turn the knob from the outside, the catch K will slide and spring enough to permit the detent D to slip out of the wheel W and catch against the side b or b' of the

projection *a*, Fig. 3. The alarm would then sound until it ran down. As the detent *D* can go no farther, the knob is prevented from turning far enough to unlatch the door. When
5 it is desired to use it as a door-alarm without fastening the door, the door-knob is turned before clamping the alarm to it until the amount of motion necessary to open the door is no more than that required to slip the de-
10 tent out of the wheel.

When the alarm is to be connected with the windows or with articles in the room, strings, passing, if necessary, through screw-eyes, are stretched from the projection *R* to the point
15 desired, care being taken not to stretch them so tightly as to impede the action of the alarm when operated by the door-knob. The method of arranging or connecting these strings forms no part of my invention. They can be so at-
20 tached as to operate reliably without the employment of any special skill or ingenuity, and arrangements of strings, wires, &c., for an analogous purpose are set forth in very many United States patents.

25 Strings attached to different parts of the frame-work *A* would be likely to release the alarm; but by attaching them to the detent in the manner shown I make the device more certain in its action.

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

1. The combination, with a burglar-alarm which is attached to the shank of a door-knob and operated thereby, of an adjustable catch

which is attached to the frame-work of the 35 alarm and which enters the crevice between the door and the jamb and limits the motion of the door-knob.

2. The combination, with a burglar-alarm which is attached to the shank of a door-knob 40 and operated thereby, of an adjustable catch which is attached to the frame-work of the alarm and which enters the crevice between the door and the jamb and is reversible to fit both right and left doors, all as set forth. 45

3. In a burglar-alarm, the combination of a detent which is pivoted to the frame-work of the machine and hooks around the door-knob shank, a clamping-screw which makes the detent fast to the door-knob shank, and a 50 catch for limiting the lateral motion of the frame-work of the alarm, which is attached thereto and slips between the door and its jamb, all as and for the purpose set forth.

4. In a burglar-alarm attached to a door- 55 knob, an elastic detent which slips between the teeth of a ratchet-wheel and is moved sidewise by motion of the door-knob, in combination with a projection from the frame-work upon which it rests and against the 60 sides of which it catches when moved far enough in either direction to release the alarm, all as set forth.

CHARLES K. DONNELL.

Witnesses:

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B. L. DONNELL.