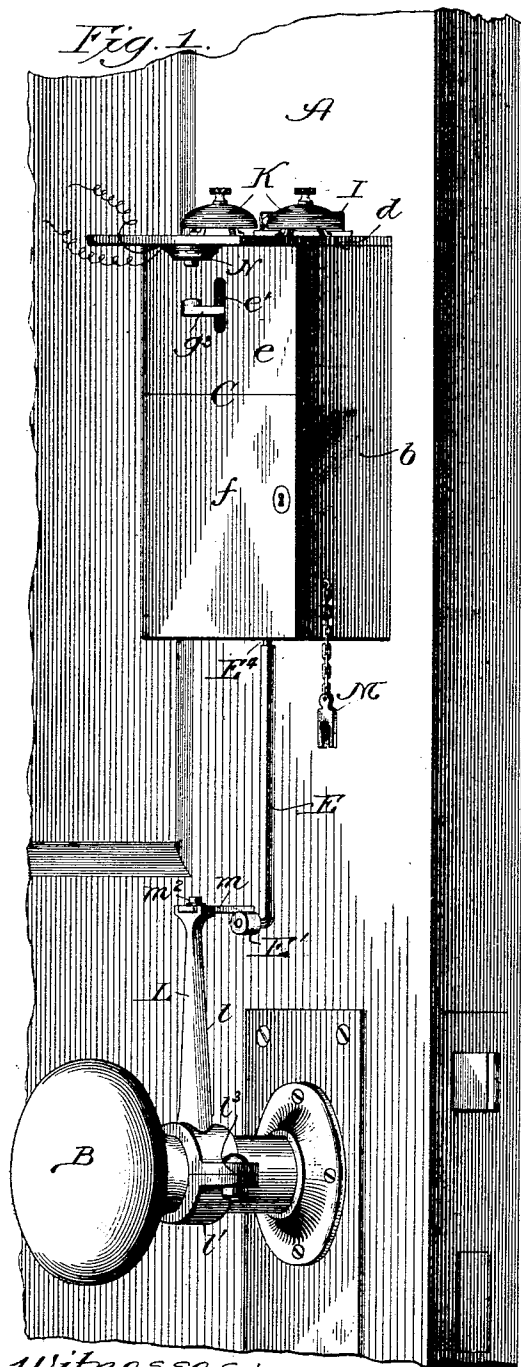


C. FRUEHAUF.
BURGLAR ALARM.

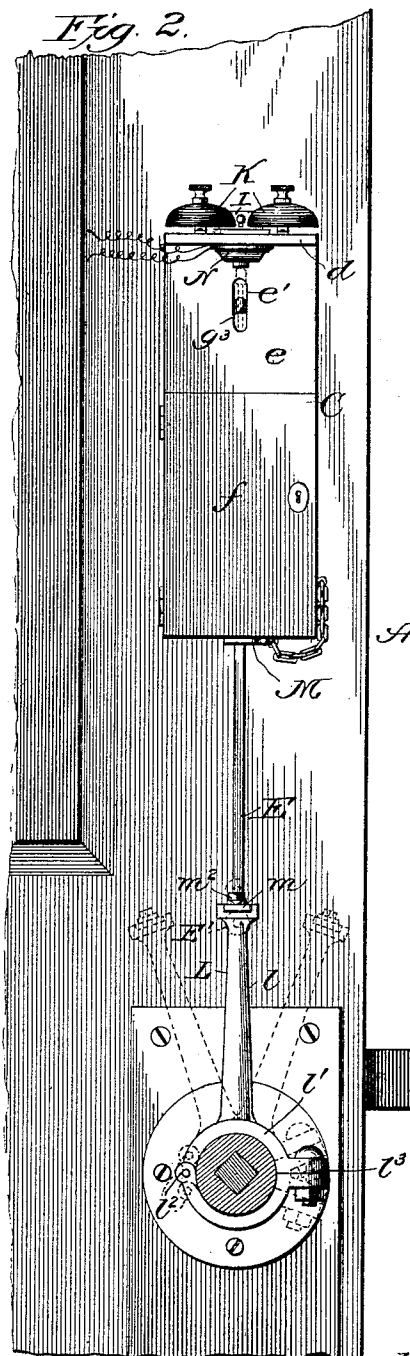
(Application filed Dec. 28, 1901.)

(No Model.)

2 Sheets—Sheet 1.



Witnesses:
E. C. Gaylord,
John Enders, Jr.



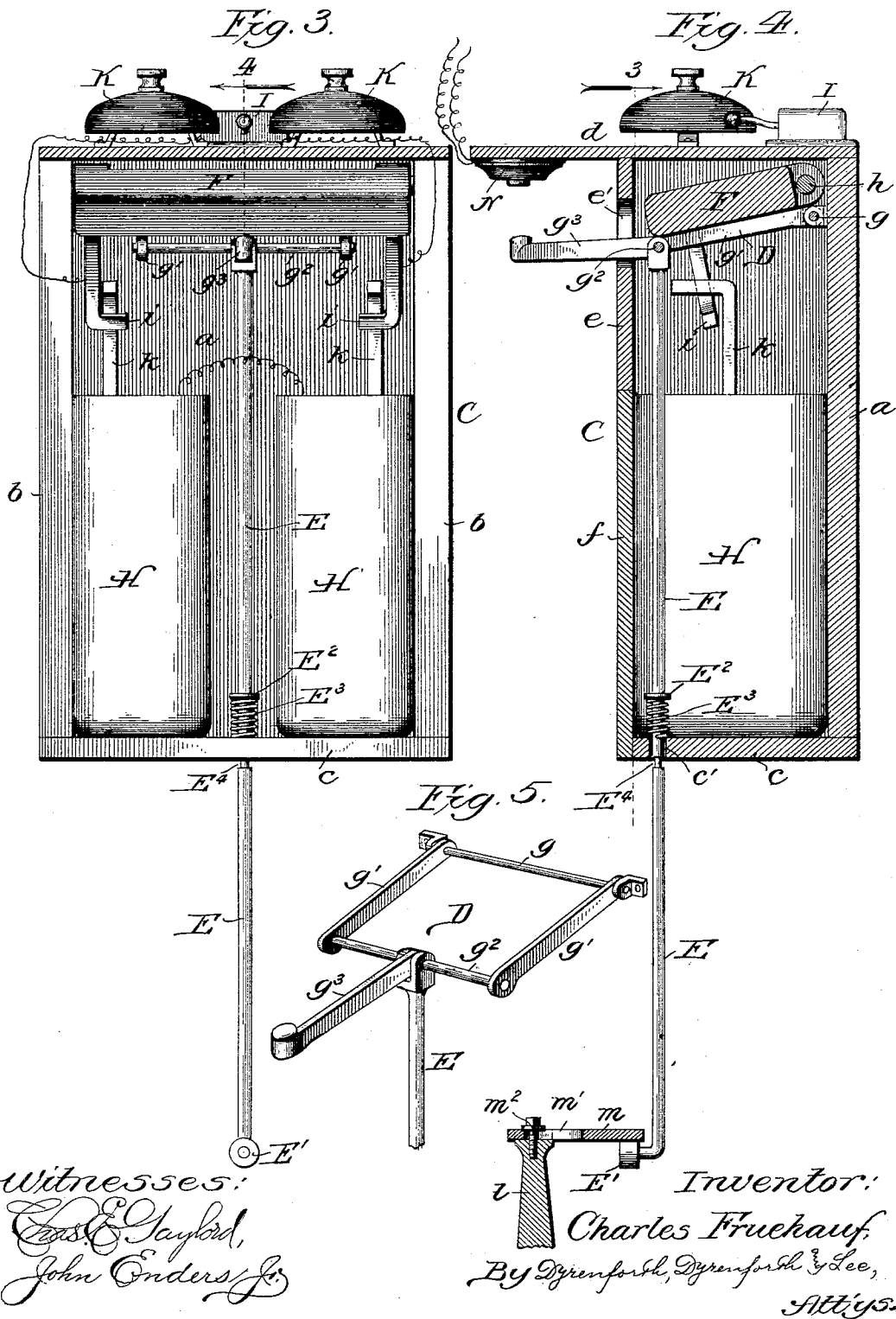
Inventor:
Charles Fruehauf,
By Dymforth Dymforth & Lee,
Att'ys.

C. FRUEHAUF.
BURGLAR ALARM.

(Application filed Dec. 26, 1901.)

(No Model.)

2 Sheets—Sheet 2.



UNITED STATES PATENT OFFICE.

CHARLES FRUEHAUF, OF CHICAGO, ILLINOIS.

BURGLAR-ALARM.

SPECIFICATION forming part of Letters Patent No. 704,247, dated July 8, 1902.

Application filed December 26, 1901. Serial No. 87,333. (No model.)

To all whom it may concern:

Be it known that I, CHARLES FRUEHAUF, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented new and useful Improvements in Burglar-Alarms, of which the following is a specification.

My object is to provide an electric burglar-alarm of improved construction for doors, windows, and the like, and which when set will cause an alarm to be given on the initial movement of the door-knob or other attachment of the door, window, or the like.

My invention consists in the general construction of the mechanism I employ, as well as in details of construction and combinations of parts, all as hereinafter described and claimed.

Referring to the drawings, Figure 1 is a broken perspective view of a door with my invention applied thereto in one convenient way; Fig. 2, a view in elevation of the same and showing the alarm mechanism out of action and the door-knob attachment in different positions; Fig. 3, an enlarged partly-sectional front elevation of the alarm device with the front removed; Fig. 4, a sectional view of the device, taken on line 4 in Fig. 3; and Fig. 5, a broken perspective view of a swinging lever and operating-rod forming details of the construction.

A is a door, and B a turning door-knob and its shank.

C is a casing, having a back wall *a*, side walls *b*, base *c*, top *d*, front upper wall *e*, and door *f*. Fastened upon the back wall *a* near the top thereof in the casing is a rod *g*, upon which is pivoted a vertically - swinging lever D, consisting of side bars *g'* *g'* and end bar *g*². Extending forward from the center of the bar *g*² is a finger *g*³, which projects through an opening *e'* in the front of the casing.

E is a vertical rod pivotally secured at its upper end to the bar *g*² and passing downward through an opening *c'* in the base *c*. At its lower end the rod is bent to a right angle and carries a vertically-disposed antifriction-roller E'. Above and parallel with the pin or rod *g* is a pin *h*, journaled in the sides *b* and carrying a block F, provided on its under side with downward-projecting hooks or con-

tacts *i* *i*, the block being weighted to normally depress the hooks out of contact with the battery-terminals presently to be described. The block F rests upon the lever D. On the rod E above the base *c* is a shoulder E², and surrounding the rod and confined between the shoulder and base *c* is a spring E³, which tends normally to raise the lever D and block F upon the pivots *g* *h*. In the casing is an electric battery or pair of batteries H H, having upward-projecting hook-shaped terminals *k* *k*, extending into the paths of the hooks or contacts *i*. The contacts *i* connect, as shown, with a magneto bell-ringer I on the top of the casing, which when in circuit sounds a bell or pair of bells K, also on the casing.

L is a door-knob attachment comprising an arm *l* and a sectional collar *l'*. The sections of the collar *l'* are hinged together at *l*² to open and pass around the shank of the door-knob and are provided at the opposite side with a pair of perforated ears *l*³ to receive a nut-bolt which clamps the attachment firmly to the shank of the door-knob. On the top of the arm *l* is a laterally-projecting finger *m*, having an elongated slot *m'*, at which it is secured by means of a screw *m*² to the arm *l*. The elongated slot *m'* permits the finger to be adjusted to extend more or less laterally from the arm.

The rod E and attendant parts are out of action when in the position shown in the drawings and are held out of action against the resistance of the spring E³. When it is desired that the alarm shall not be sounded, a catch M, suspended from the casing, is inserted between a shoulder E⁴ on the rod E and the base *c* of the casing, as shown in Fig. 2. When it is desired to place the alarm device in operation, the catch M is removed and the roller E' caused to rest against the under side of the finger *m* on the knob attachment L. When the knob is turned in either direction, as indicated in Fig. 2, the finger *m* releases the roller E', and the rod E is raised by the spring E³ until the contacts *i* engage the terminal hooks *k*. This closes the battery-circuit and causes the bell K to be sounded by the magneto bell-ringer.

In the construction shown the top *d* of the casing projects forward from the front and is

provided on its under side with a push-button N, from which wires may extend to an electric alarm in any part of the house or in a police-station. The push-button is in the
 5 path of the finger g^3 and is actuated by the latter when the lever D is raised as described.

In practice the casing C may be located in any convenient position upon a door or window casing, and the attachment to engage the
 10 rod E when the device is set and which releases the rod when the door-knob, door, or window is moved may be of any convenient form suitable for the purpose.

When the device is used upon the front
 15 door of a house, I prefer to have the alarm sounded by the initial turning of the door-knob, as described.

The construction shown is particularly simple and desirable for its purpose; but this
 20 construction may be changed in the matter of details without departing from the spirit of my invention as defined by the claims.

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

25 1. In an electric burglar-alarm for doors and the like, the combination of battery-terminals, a pivoted support, contacts on the support movable to engage the terminals, a
 30 spring-pressed rod movable to engage the block and elevate the contacts into engage-

ment with the terminals, an electric circuit including an alarm-signal connected with the contacts, and means on the door for engaging and restraining the rod.

2. In a burglar-alarm for doors and the like 35 the combination of a normally open electric circuit including contacts and an alarm-signal, a separate normally open distant alarm electric circuit, including a circuit-closer, a swinging lever adapted in its movement in one direction 40 to elevate the contacts into engagement with the terminals, an arm on the lever arranged to engage the closer of the other circuit, a rod for moving the lever and means on the door or the like for restraining the rod. 45

3. The combination of a casing, an electric battery in the casing having hooked terminals k , swinging lever D in the casing carrying hooked contacts i in circuit with alarm-sounding mechanism, rod E connected with 50 the lever and extending through a wall of the casing, spring upon the rod tending normally to move the lever to cause the contacts i to engage the terminals k and means for engaging and releasing the rod, substantially 55 as and for the purpose set forth.

CHARLES FRUEHAUF.

In presence of—

ALBERT D. BACCI,
 WM. B. DAVIES.