

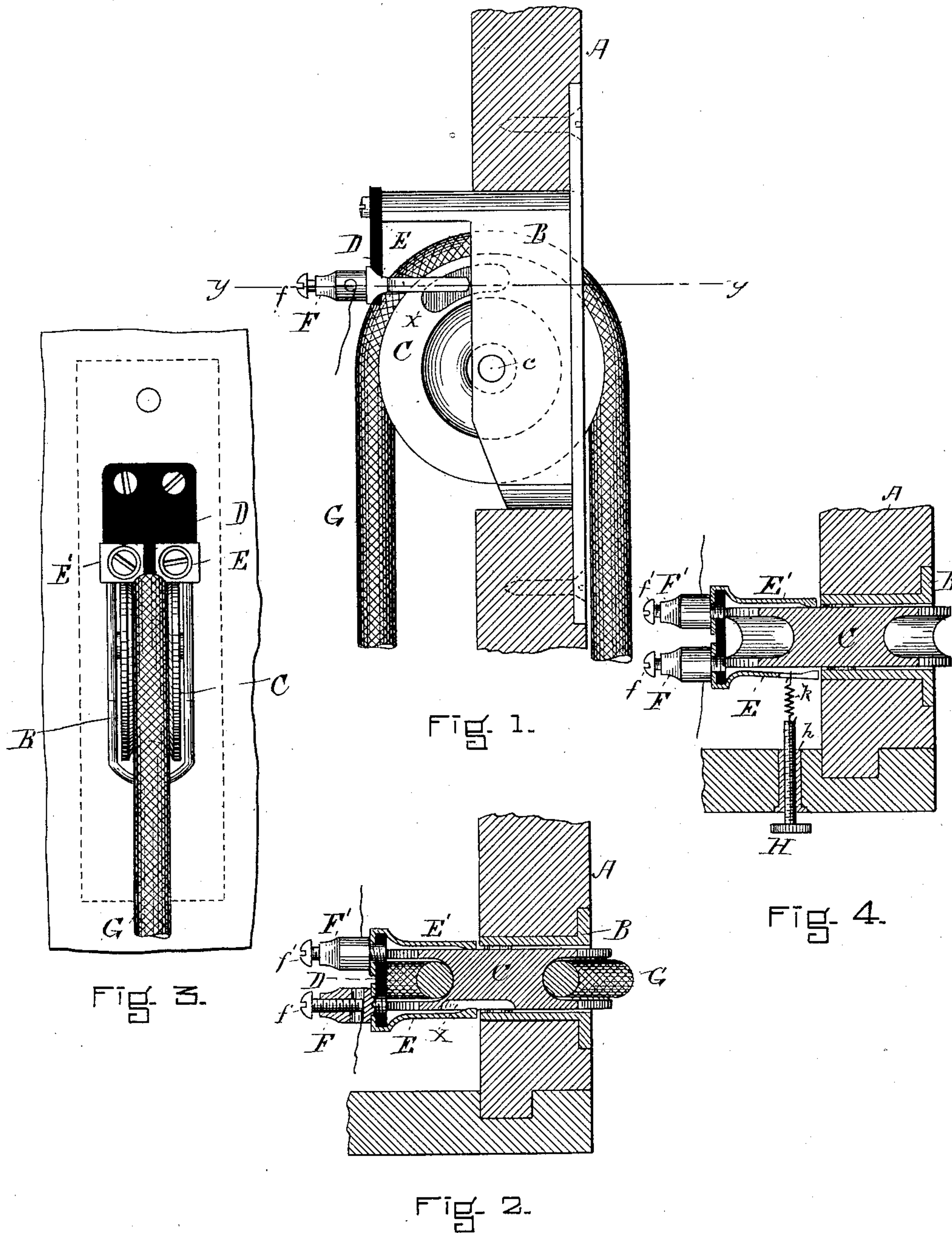
(No Model.)

A. E. HATHAWAY.

BURGLAR ALARM.

No. 368,336.

Patented Aug. 16, 1887.



WITNESSES.

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UNITED STATES PATENT OFFICE

ALBERT E. HATHAWAY, OF NEEDHAM, MASSACHUSETTS.

BURGLAR-ALARM.

SPECIFICATION forming part of Letters Patent No. 368,336, dated August 16, 1887.

Application filed November 18, 1886. Serial No. 219,238. (No model.)

To all whom it may concern:

Be it known that I, ALBERT E. HATHAWAY, of Needham, in the county of Norfolk, State of Massachusetts, a citizen of the United States, have invented a new and useful Improvement in Burglar-Alarms, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part of this specification, and in which like letters of reference indicate corresponding parts.

My invention relates more particularly to devices to be employed upon windows and doors of dwellings and other buildings through which ingress may be made.

In the drawings, Figure 1 represents a side elevation of the device as placed in a window-casing. Figs. 2 and 4 are cross-sections upon the line *y y*. Fig. 3 is a front elevation of the device as affixed in the window casing or frame.

A is a window-casing, into which is inserted the frame B in the usual manner. This frame carries the grooved pulley C and is journaled therein, as shown by *c*. Upon one side of the pulley C a recess, *x*, is formed, as shown in Fig. 1. To the part projecting backward from the top of the pulley-frame is attached a plate of rubber, D, or other non-conducting substance. Near the end of the said plate of rubber D are fitted two metallic springs, E E', Fig. 2. These are held in place by the screw-pieces F F', which pass through the overlapping top of each spring and are secured to the rubber plate D. In the top of each of these screw-pieces is placed a small screw, *f f'*, which screws press upon and hold the ends of the wires, which pass into holes made therefor in the screw-pieces F F', as shown in Fig. 1. The two wires represent the two poles of an ordinary electric battery. It will be observed that the lower ends of the springs E E' press upon the sides of the pulley C, except that when the spring E is opposite the recess *x* it does not press upon or touch the said pulley, and that then the circuit is broken.

A cord, G, passes over the pulley C, resting in the groove of the same, in the ordinary manner. To one end of the cord is attached a weight, while the opposite end is secured to the window-sash.

If the spring E rests over the recess *x* when

the window is closed, it is obvious that if the sash is raised the pulley C will be revolved and the recess *x* will pass away from the spring E, which will then rest upon the face of the side of the pulley C, and the circuit will be closed. By this means an alarm will be sounded at any point or in any room of the premises to which the wire is connected. It may also be used in connection with a battery and annunciator to designate particular windows or doors to which the device is attached.

The particular form of springs E E' is not essential; but, for convenience, I prefer the style shown in the drawings. The recess *x* may be longer or shorter, or there may be several formed upon the side of the pulley C, as desired. A piece of rubber may be inserted in the recess *x* if it is desirable that the spring should press upon the side of the pulley continuously. Of course any recess or the insertion of any non-conducting substance so placed as to close the circuit when the pulley is revolved would come within the spirit of my invention.

By my device it will be seen that a window or door may be left open more or less, with the spring E resting over the recess *x*, but that any attempt to either open or close the same will complete the electric circuit and sound an alarm.

My device can be easily and cheaply attached to the ordinary forms of window-sash pulleys. It can also be readily applied to door rollers or pulleys and work in a most efficient manner.

Another part of my invention is shown in Fig. 4.

During the day-time it is not desirable to have an alarm rung upon each opening or closing of a window or door to which it is attached. I therefore provide a further device for holding the spring E from contacting with the face of the pulley C when it is revolved. This device is represented by the thumb-screw H, which is held in the side window-casing and operated in a threaded socket, *h*. To the end of the thumb-screw H is attached an insulating wire or thread, *k*, and which is connected with the spring E. Now by turning outwardly the thumb-screw H the spring E will be withdrawn from the side face of the pulley C and

the circuit will be permanently broken until such time as the thumb-screw shall be turned inwardly and the spring E allowed to operate as a circuit-closer in its normal manner.

5 The latter device, while important and convenient to be used in connection with the principal invention, is subsidiary to it, and may be dispensed with in many cases without detracting from the importance and value of the
10 main invention.

I do not confine myself to the precise form of parts herein described and shown.

Having now fully described my invention, what I claim, and desire to secure by Letters
15 Patent of the United States, is—

1. A burglar-alarm consisting of suitable batteries, wires, annunciators, or alarm-bell, in combination with the casing A, pulley-frame B, provided with pulley C, having the recess
20 *x*, the cord G, non-conducting plate D, and the circuit-closing springs E E', suitably secured to the plate D, substantially as and for the purposes described.

2. In a burglar-alarm, the combination of the frame B, provided with the pulley C, having a recess, *x*, in combination with the circuit-closing springs E E', and adapted to operate substantially as and for the purpose set forth. 25

3. A burglar-alarm consisting of the frame B, recessed pulley C, and suitable circuit-closers, combined with the thumb-screw H, socket *h*, non-conducting wire *k*, and the spring E, all arranged and adapted to operate as and for the purposes described. 30

4. In a burglar-alarm, a sash-pulley journaled in a frame and adapted to receive and be revolved by a cord, said pulley being provided with an insulating surface or cavity and with suitable circuit-closers, all combined and adapted to operate substantially as and for the
40 purposes set forth.

Subscribed this 4th day of June, A. D. 1886.

ALBERT E. HATHAWAY.

Witnesses:

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LILLIAN S. MAYO.