(No Model.)

2 Sheets—Sheet 1.

F. A. LANGEWALD.

BURGLAR ALARM.

No. 263,922.

Patented Sept. 5, 1882.

Fig. 1

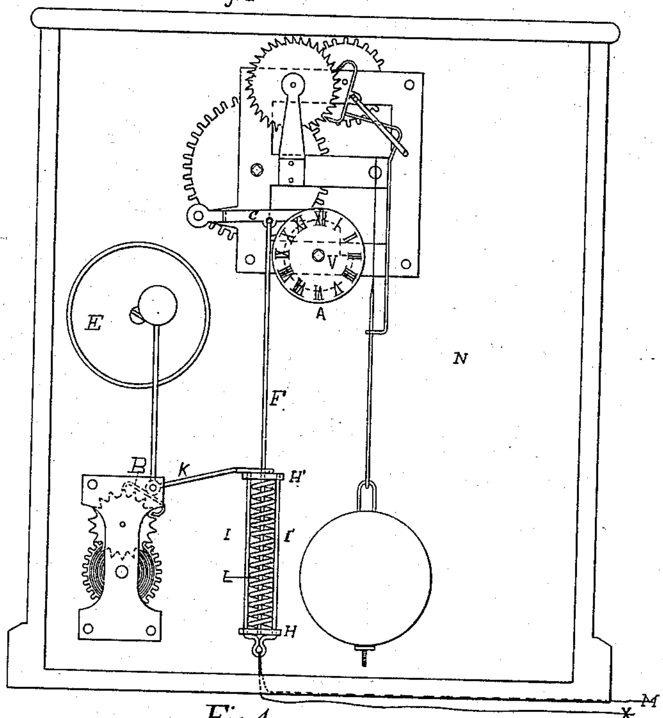


Fig. 2.

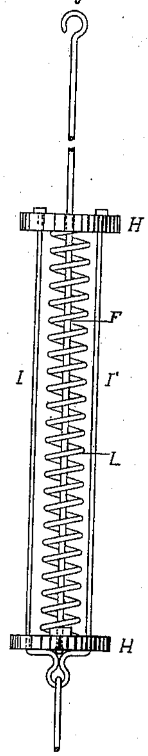


Fig. 3

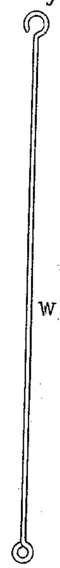


Fig. 4.

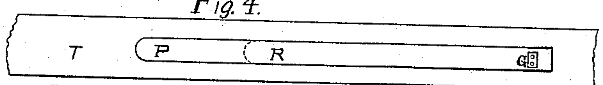


Fig. 5.

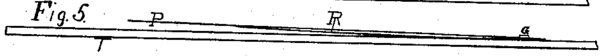
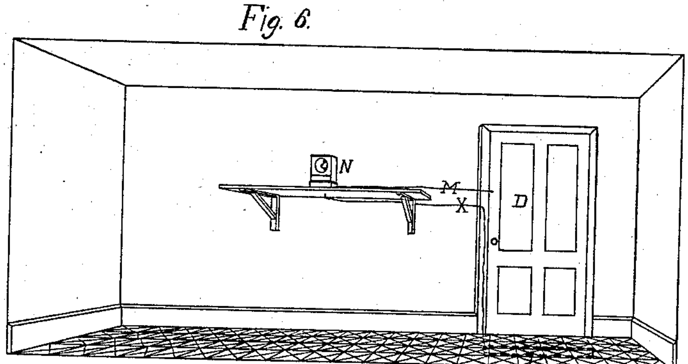


Fig. 6.



O P

Witnesses:
John J. Reardon
C. D. Kelly

Inventor:
Ferdinand A. Langewald
per H. K. Hawes, Attorney

N. PETERS. Photo-Lithographer, Washington, D. C.

(No Model.)

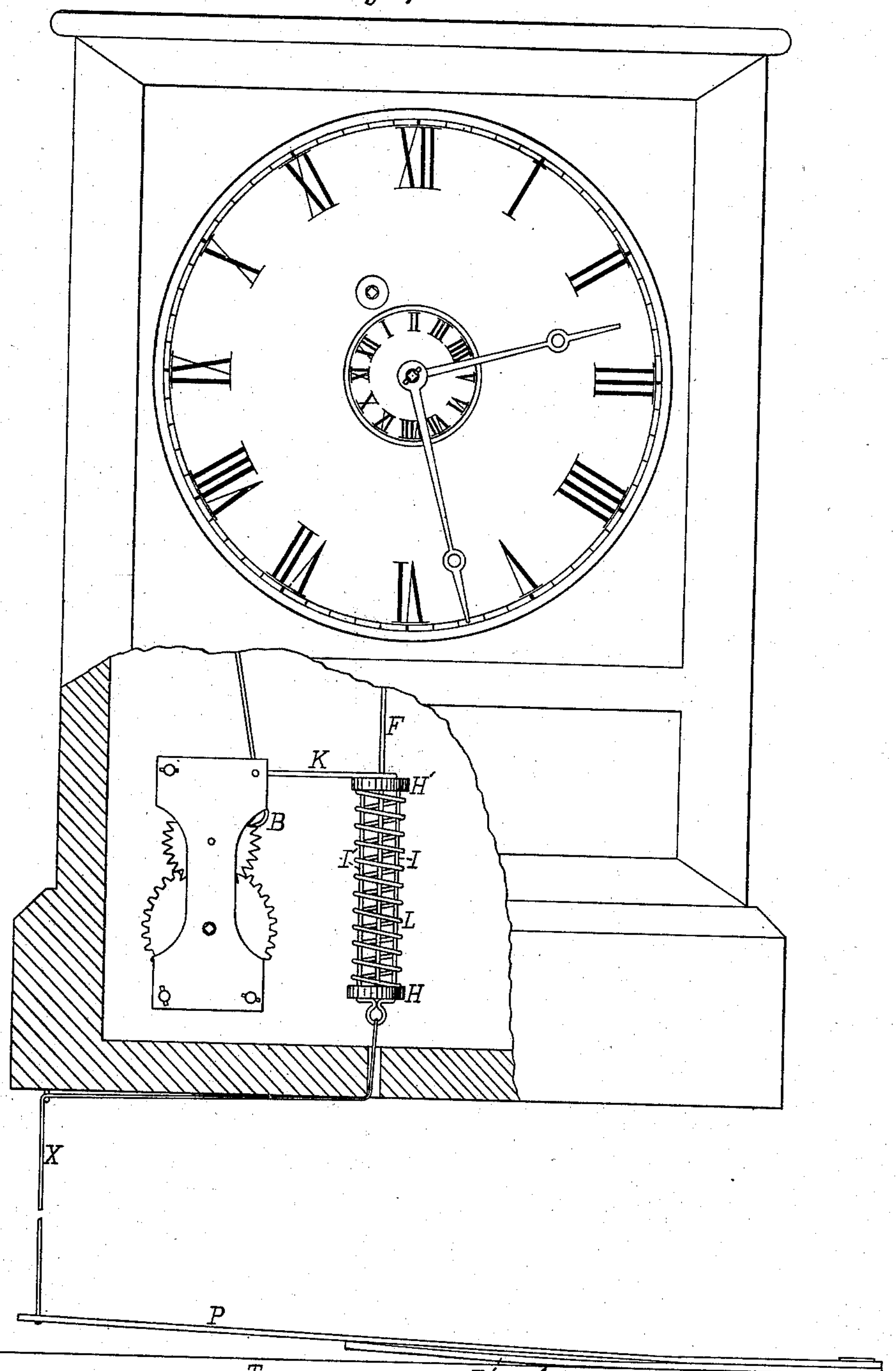
2 Sheets—Sheet 2.

F. A. LANGEWALD.

BURGLAR ALARM.

No. 263,922. Patented Sept. 5, 1882.

Fig. 7.



Witnesses:
John F. Meadows
H. H. Tuwozzy

Inventor:
Ferdinand Langewald,
Per H. K. Hawes,
Attorney.

UNITED STATES PATENT OFFICE.

FERDINAND A. LANGEWALD, OF CHICOPEE, MASSACHUSETTS.

BURGLAR-ALARM.

SPECIFICATION forming part of Letters Patent No. 263,922, dated September 5, 1882.

Application filed April 5, 1882. (No model.)

To all whom it may concern:

Be it known that I, FERDINAND A. LANGEWALD, a citizen of the United States, residing at Chicopee, in the county of Hampden and State of Massachusetts, have invented certain new and useful Improvements in Burglar-Alarms, of which the following is a specification, reference being had to the accompanying drawings, forming a part thereof.

My invention relates to burglar-alarms having a bell operated by a lever-escapement, and is designed to be used in connection with alarm-clocks having a bell so operated.

In the drawings, Figure 1 is a face view of an alarm-clock with my invention attached. A is the clock-dial. B is the alarm-escape lever, which, by means of the wires K and F, is connected with the lever C, which in ordinary alarm-clocks is raised and lowered by a cam on the dial-stud for the purpose of letting off the chronometer-alarm and the burglar-alarm let-off H′, and E is the alarm-bell.

Fig. 2 is a view of that portion of the burglar-alarm let-off shown in Fig. 1, consisting of the wire F, which passes through the button H′ and the spiral spring L, and is fastened to the button H, and the wires I I′, which are fastened to either side of the button H′ and vibrate with the button H′ upon the spring L, and are made to move freely up and down through the button H.

Fig. 3 is the wire connecting the chronometer let-off C with the arm K of the escapement B in an alarm-clock without the burglar-alarm let-off attached.

Fig. 4 is a top view of a pedal-communicator, to be placed upon the floor under the carpet, as seen in Fig. 6, and is connected with the burglar-alarm let-off by means of the taut wire X.

Fig. 5 is a side view of the pedal-communicator, showing the springs P and R attached to a board of the floor. R is a shorter and P a longer and overlapping wooden spring-board.

Fig. 6 shows the alarm-clock connected with the pedal-communicator.

Fig. 7 is an enlarged view of my device, showing the dial-face of the clock.

The wire F, Fig. 1, which depends from the lever C for the purpose of connecting that lever with the alarm let-off by means of the arm K, is fastened to the button H, which moves only with the wire F. The wires I I′, running through the button H, are fastened to the button H′, which vibrates upon the spring L, and the wires I I′ are connected at the base of the button H, forming a loop to which the communicating-wires are attached, and if the wires I I′ are pulled downward by the communicating-wire X, or by any communicating-wire attached to them, the vibrating button H′, to which they are fastened, will be drawn down upon the spring L, while the wire F, which runs through the button H′, connecting the chronometer with the clock-alarm, will remain unmoved.

The arm K of the escapement B rests upon the button H′, and if the button H′ be drawn down by the wires I I′ the arm K will fall, the escapement B will rise, and the alarm be let off.

In the pedal-communicator, Fig. 5, P, the overlapping spring-board, the point of which is connected with the let-off by the wire X, will be about three-fourths of an inch from the floor when it is covered by the carpet, as shown in Fig. 6.

If any person step upon the pedal-communicator the vibrating end of the spring-board P (see Fig. 5) will be pressed down to the floor, pulling down the wire X, which, with the wires I I′, will pull down the button H′, the arm K of the escapement B will fall upon and with the button H′, the escapement B will rise, and the alarm be let off.

In Figs. 1 and 2 the wire M is a wire to be attached to a door or window by means of a simple wire hook and screw, and upon raising the window or opening the door it will communicate the motion to the alarm by means of the wires I I′, to which it is attached.

The purpose of combining a burglar-alarm with an alarm-clock is to make one alarm apparatus perform the double service of a chronometer-alarm and burglar-alarm, thus economizing in machinery and space.

I claim as my invention—

In combination with a chronometer-clock, the burglar-alarm consisting of the connecting-wire F, alarm escape-lever K, spring L, sliding button H, tension-wires I and I′, stationary button H′, communicating-wire X, and pedal-communicator consisting of the short spring-board R and overlapping spring-board P, constructed and combined as and for the purpose set forth.

FERDINAND A. LANGEWALD.

Witnesses:

JOHN J. REARDON,

H. H. TRIWORGY.