

*W. Reynolds,
Burglar Alarm.*

No. 111,003.

Patented Jan. 17. 1871.

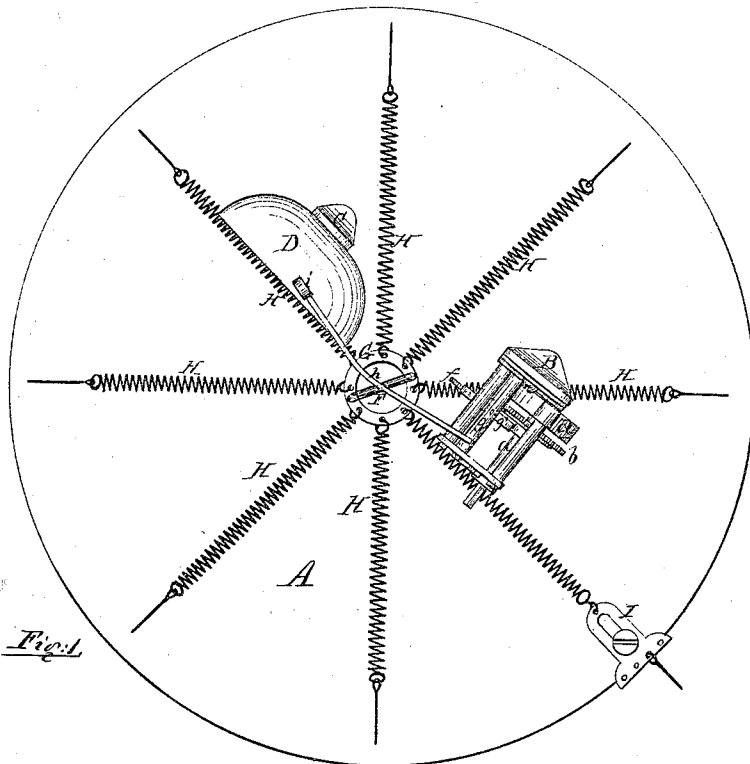


Fig. 1.

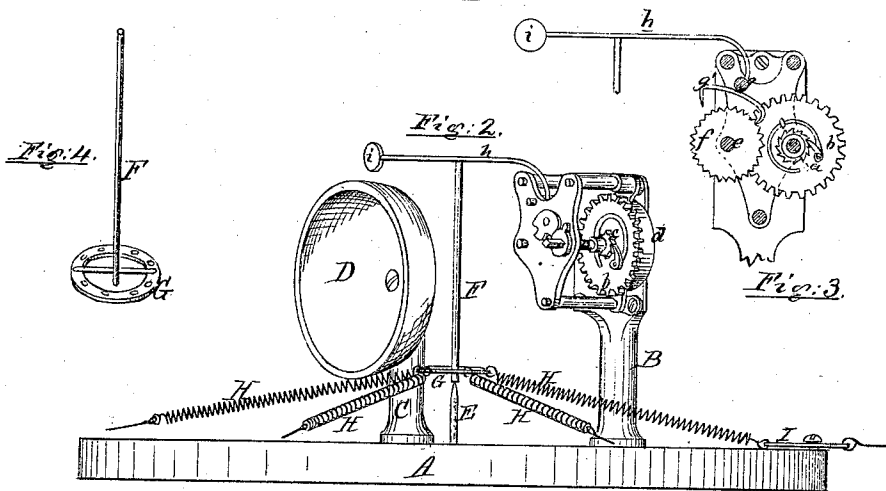


Fig. 4.

Fig. 2.

Fig. 3.

WITNESSES.
Chas. Buck
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his atty.

United States Patent Office.

WILLIAM REYNOLDS, OF MANCHESTER, NEW HAMPSHIRE.

Letters Patent No. 111,003, dated January 17, 1871.

IMPROVEMENT IN BURGLAR-ALARMS.

The Schedule referred to in these Letters Patent and making part of the same.

I, WILLIAM REYNOLDS, of Manchester, in the county of Hillsborough and State of New Hampshire, have invented certain Improvements in Burglar-Alarms, of which the following is a specification.

My invention relates to alarms to be used in buildings, and is operated by the opening of any door or window with which it is connected.

The nature of my invention consists in so arranging the operative parts that the hammer-arm rests directly upon the movable or supporting-rod, the displacement of which causes the alarm to be set in motion.

In the accompanying drawing—

Figure 1 is a plan of my alarm;

Figure 2, a side elevation;

Figure 3, a vertical section, showing a part of the operative parts; and

Figure 4 is a perspective view of the detachable rod.

A represents a base or table, to which the various parts of the alarm are attached;

B is a standard, to which the frame (in which is placed gearing similar to that used in ordinary alarm-clocks) is secured;

C, a standard, to which is secured a gong, D; and

E is a supporting-post, the upper end of which is pointed, or nearly so.

a is a shaft, on which is a cog-wheel, *b*, ratchet-wheel, *c*, and a flat coil-spring, *d*.

The outer end of this shaft is square, on which the key fits to wind up the spring *d*.

On the shaft *e* is a pinion and scape-wheel, *f*, and over it is another shaft, *g*, to the under side of which is attached an arm, *g'*, and on each end of it is a pallet, which operate on the teeth of the scape-wheel.

Attached to the shaft *g* is an arm, *h*, which extends over the gong D, and on its outer end is a ball or hammer, *i*.

F is a detachable rod, which, when it is desired to set the alarm, is placed upon the top of the supporting-post E, and the arm *h* rest upon it.

Near the lower end of this rod F is attached a ring, G, in which are several holes.

Around this ring and attached to it are several springs, H, the outer ends of which are connected to

the wires or cords that extend to the doors or windows.

I is a connecting-plate, which may be used when it is desired to connect several wires or cords to one spring. In it is a slot, through which passes a screw which secures it to the base A. The inner end of the plate is attached to the spring, and in its outer end are several holes to receive the ends of the wires or cords.

Its operation is as follows:

One end of each of the wires or cords are attached to the doors or windows that it is desired to connect with the alarm, and their other ends to the springs H or to the connecting-plates I.

The arm *h* is then raised, and the detachable rod F placed between it and the supporting-post E.

When the arm *h* is raised up in this position it holds one of the pallets on the arm *g'*, between two of the teeth of the scape-wheel *f*, thereby preventing any movement of the operative parts of the alarm.

The spring *d* can now be wound up and the alarm is set.

Should any door or window which is connected with the alarm be opened, the detachable rod F is immediately thrown from its position on top of the supporting-post E and from under the arm *h*, thus releasing the scape-wheel *f*, and allows the spring *d* to exert its power to operate the cog-wheel on the shaft *a*, and it, the scape-wheel *f*, the teeth of which striking the pallets on the arm *g'*, give it and the arm *h* a vibratory motion, causing the ball or hammer *i* to rapidly strike the gong D and sound an alarm.

I do not claim supporting the hammer-arm by means of a separate-arm or lever; but

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

The combination of the supporting-post E, detachable rod F, and hammer-arm *h*, when said hammer-arm rests directly upon the rod F, all constructed and operated substantially as shown and described.

WILLIAM REYNOLDS.

Witnesses:

GEORGE A. CLARK,
JOHN D. POWELL.