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WILLIAM FITCH GARDINER.

Improvement in Burglar Alarms.

No. 121,862.

Patented Dec. 12, 1871.

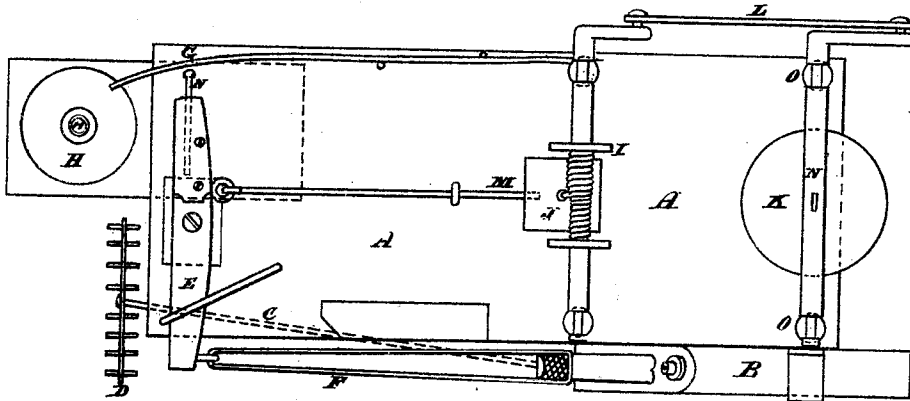


Fig. 1.

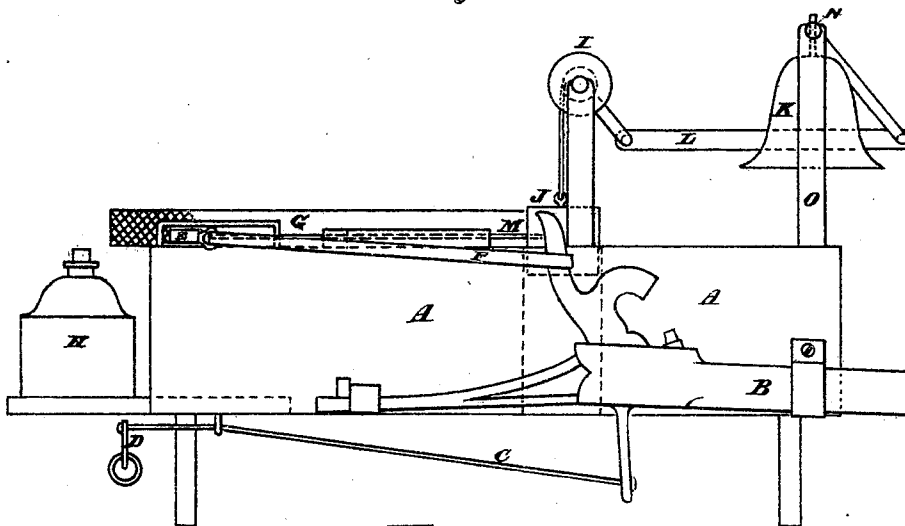


Fig. 2.

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Witnesses.

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UNITED STATES PATENT OFFICE.

WILLIAM FITCH GARDINER, OF BETHANY, CANADA.

IMPROVEMENT IN BURGLAR-ALARMS.

Specification forming part of Letters Patent No. 121,862, dated December 12, 1871.

To all whom it may concern:

Be it known that I, WILLIAM FITCH GARDINER, of Bethany, in the county of Durham, in the Province of Ontario and Dominion of Canada, have invented certain Improvements in Burglar-Alarms, of which the following is a specification:

The invention relates to the combination of a pistol, a match-lighter, a lamp, and a bell, and the arrangements for connecting them.

The device is operated by the tension of any one of a number of cords connecting the several doors and windows to the trigger of a pistol. The hammer of the pistol in its movement operates a lever carrying a match, which is thus ignited and brought to the wick of a lamp, lighting the same. The said lever in turn disengages a detent, releasing mechanism which sounds a continuous alarm by ringing a bell.

Figure 1 is a top view of a device embodying my invention. Fig. 2 is a side view of the same.

A represents the block or body of the device, to which is fastened at one side a pistol, B, the trigger of which is connected, by a wire, C, to a disk, D, having a series of rings, to which cords leading to the several windows and doors are attached. The tension of any one of these cords operates the device and gives the alarm. On the top of the block A is pivoted a match-lever, E, one end of which is connected to the cock or hammer of the pistol by an elastic band, F, or spiral spring. In the other end of the lever is inserted a match, N, which, when the lever operates, ignites by friction with the plate G, and is carried to and lights the wick of the lamp H, attached to one end of the device. On the top of the block A is erected a windlass, I, winding a cord attached to a weight, J, which descends and passes through a hole in the block A, when the detent M is liberated therefrom by the lever E, to

which one end of the detent is connected. K is a bell hung on a shaft, N, which is supported on standards O affixed to the block A. The windlass and bell-shafts have cranks, which are connected by a rod, L.

A cord from each door and window is attached to the several rings on the disk D, and by the tension of any one of them by the opening of a door or window the trigger is pulled, thereby releasing the cock, which explodes a cap on the nipple and fires the pistol. The cock in descending draws the outer end of the match-lever toward it and causes the match to ignite by friction with the plate G and lights the wick of the lamp over which it stops. The lever in turn withdraws the detent from the weight, causing it to fall; the cord running off the windlass turns its crank, which being connected by the rod to the crank of the bell-shaft causes the bell to ring.

The device is fastened in a suitable position in a room at a convenient height from the floor, or it may be secured to a shelf over a door or window, a mortise being cut in the shelf to allow the weight to pass through.

I claim as my invention—

1. The pivoted arm E, carrying a match, N, upon one end, and a cord attached to the trigger of the gun at the other, in combination with the detent M, substantially as and for the purpose set forth.

2. The arrangement of the trigger-wire C, disk and rings D, elastic band F, detent M, plate G, cord and weight J, windlass I, and connecting-rod L for operating the pistol B, match-lever E, shaft N, and bell K simultaneously, substantially in the manner described.

W. F. GARDINER.

Witnesses:

JOHN VANCE,
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